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An ENQUIRY into the
STRUCTURE
OF THE
HUMAN BODY,
Relative to its
SUPPOSED INFLUENCE
ON THE
MORALS of MANKIND.

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SPLEN *ridere* FACIT; COGIT *amare* JECUR.

————— *Sunt certa PIACULA, quæ Te
Ter purè lecto poterunt recreare libello.*

*Invidus, iracundus, iners, vinosus, amator,
Nemo adeo ferus est ut non mitescere possit,*

Si modo culturæ patientem commodet aurem.

HOR.

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M.DCC.LXIV.

Of Temperament, and Age of Man, Of
Force of Habit, and Supposed Decay
of Nature

Of Education, and Reason

Of Passions

Of Conscience

C O N T E N T S.

<i>Of the Blood.</i>	—	—	—	p. 15
<i>Of the Fibres.</i>	—	—	—	24
<i>Of the Nerves.</i>	—	—	—	33
<i>Of the Temperaments, and Ages of Man. Of the force of Habit; and supposed Decay of all Nature.</i>	—	—	—	41
<i>Of Education, and Fashion.</i>	—	—		51
<i>Of the Passions.</i>	—	—	—	57
<i>Conclusion.</i>	—	—	—	66

AN ENQUIRY INTO THE
STRUCTURE

HUMAN BODY,

ERRATA.

—page 7. line 16. *for firebands read fire-*
brands.

—p. 30. l. 23. *for by r. to.*

An ENQUIRY into the
S T R U C T U R E
O F T H E
H U M A N B O D Y, &c.

TO remove the objections that have been made against Providence by some, as if he had formed men of such materials, as almost necessarily impelled them to illicit actions, is the design of the following sheets. A design almost naturally interwoven with the study, and demonstration of the Structure of man; and has therefore frequently been the subject of the Author's reflections. And which it is hoped will be received with the usual candor, of this Seminary of Religion, and Seat of Literature.

But it will not be found disadvantageous to the subject, to set out at first with some medical reasoning. For it will by and by appear, that for want of duly attending to the relative fitness of things, not only the Prescriber, but the Preacher may miscarry :

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And

And that this fitness considered with a view to the art of healing, will greatly clear up the subsequent reflections, on that of reforming.

The remedies which Physicians apply, have no innate, and absolute qualities; but such only as the nature of the parts which they touch, will allow them to exert; so that a variation in the structure, or condition of parts, will vary, and even sometimes frustrate the effects of a medicine. And hence the classing of remedies which have no universal, or invariable effects, as it tempts many to profess a Science, which seems thus easy of attainment, so will often really distress the mind of a conscientious prescriber.

For how few among the many that offer their services to the sick, will at first keep clear of the specious temptation, of attacking a disorder by some privileged medicine, sent to it in its supposed fortress? and with which aids, all Catalogues of both simple and compound remedies do too much abound. Whereas the attentive practitioner quickly finds, that there is a time for all things, necessary to be observed, to secure even a possibility of success; and that a hasty determining of the disease, and an in-

dis-

discriminate application of the remedy, proves as little for his own reputation, as for his patient's advantage. For after all, what is this but to act the part of the *self-conceited Nurse*, that fatal character to the human race, who like Homer's Hero, though with other weapons,

πολλας ιφθιμυς ψυχας αιδι προϊαψεν.

and indeed were disorders as easily known as named, and every appropriated remedy as certainly efficacious, as it is sure to be applied by such people, there would be no want of Physicians in the world, whose very business it is to make these necessary distinctions; but who are frequently not called upon till fatal experience has convinced the Patient, that such distinctions ought previously to have been made.

As remedies therefore have no necessary, self-existing, independent virtues, considered abstractedly from the Body to which they are applied; so the same is (in a great measure at least) true of diseases. I question whether there can exist a morbidic cause, which no Constitution, Sex, Age, Climate, Circumstance or Condition is capable of excluding. At least we know that those most virulent destroyers of mankind, Plague and

Poison, cannot claim this privilege: many escaping the former, though constantly conversing with the sick; and many Animals feeding innocently on the latter, and sometimes even the human race.

Nor is there any thing that need astonish us in all this. Man's Body is made of matter, as well as the rest of the Creation, and while alive must be subject to the laws of matter, and motion; and every thing applied to it, whether as food, or physic, can act only by being put in motion, and communicating that motion to certain parts. And it is no more surprizing that the same cause should not operate equally on all bodies, than that the same degree of heat should not equally affect Gold and Lead.

If it be objected, that *Hippocrates* refers us to a *Deus*, as the cause of some diseases: we answer, that he did not mean thereby, such an exertion of the divine power, as suspended the known laws of nature in those diseases; in which sense only, this could be any objection; but he either means to conceal his ignorance of the true cause of the disease, under this so specious a supposition; or really struck with the horrid appearance of some epileptic Patient, he fancied it in-

flict-

dicted as a judgement, and so of divine original. We do not at this day deny the influence which some of the celestial bodies have on man; but we do not allow them that absolute, and irresistible power, which would almost literally make every man a Lunatic, and bring down the menses profusely in every woman, and exactly at the same time.

It appears then that a relative fitness of Body may be as necessary for the admission of a Disease, as of a Remedy. And upon this relative fitness of causes and their effects, is built the whole of rational practice; and this knowledge possessed in greater, or less perfection, determines the several degrees of reputation possessed by different practitioners; and the total want of which, is the glaring badge of the audacious, and desperate Quack.

There have not been wanting those, who have thought this knowledge too extensive for human nature to compass. While others, as though it were confined in too narrow bounds, have increased, instead of removing the difficulty. And both are in the wrong. To prove the first so, we need but to appeal to the number of such, who have

have been recovered from long, and dangerous illnesses, of which the nature was explained, the consequences foreseen, and the effects of the remedies foretold. Nor let it be objected that this success must depend on certain, and repeated experience; for it is granted. But then we assert, that what was the labour of Ages, to our Predecessors in practice, becomes our own on easier terms. Namely, by the study of their works; and that the many hours they lost in a mistaken theory, for want of understanding the circulation of the blood, and in a mistaken practice, for want of that knowledge, is so much time, and experience gained to their successors.

But it is the second sort of men who multiply causes *ad infinitum*, who have contributed to this mistaken notion; especially such as have created imaginary governors, or rather tyrants, shall I call them, of the human frame. If it were not attended with so much danger to the public, one could almost be diverted at the absurd Rhapsodies of these writers. What a whimsical Triumvirate has *Dolæus* given us? *Microcosmetor*, King of the Brain. *Cardimelech*, of the Heart. And *Gasteranax* of the Ab-

domen! and what mad pranks does he not make these royal Personages play? speaking of the *Pbrenitis*, he thus describes it "*Quemadmodum Imperatoris illud monstrum Nero, furibundo ardore Romanas ædes accendit, indeque maximas turbas excitavit, sic, et hic noster Microcosmetor fit Cosmetorges, i. e. Rex Iræ.*" A very improper ruler sure for the rational part of Man. And indeed he sometimes (we are told) quits the reins of government rather abruptly: *Cosmetorges aliquando a seipso vindictam poscit, et tanquam Ajax, in proprium gladium incumbit.*" This is the case in melancholy. But in madness it is, that he shines supremely mischievous, and scatters his firebands in sport. "*Hoc in affectu (Mania) Microcosmetor nobis est quasi incendiarius, qui spiritus animales hominis accendit. Qui ita accensi instar Vulpium Samsonicarum, percurrunt omnes fossulas cerebri.*" These and similar effusions of an overheated imagination to be met with in writers of this Stamp, would indeed extend the territories of medical knowledge beyond the reach of the life as well as the apprehension of man. But to return—

Thus much I suppose will be allowed me, 1st, That God has created substances,
Vege-

Vegetable, Animal, and Mineral, with certain fitnesses relative to the state of Man's Body, both in health and sickness, and whereby the former may be preserved, and the latter often removed. 2dly, That we are capable of discovering what these relations are, so as to apply them properly for the benefit of our fellow-creatures. 3dly, That if we apply them unsuccessfully, through ignorance, or inattention, it no ways destroys the certainty on which much of the art of Physic is founded. And lastly, That the changeable condition of our bodies, by varying the effects of the same application, though it may astonish heedless and unreflecting men, is a very natural effect, of an unavoidable cause. For whatever alters the tone of the Solids (by which is meant a certain degree of strength and resistance,) and destroys the proper crasis of the fluids, lays a foundation for, if not actually brings on a disease: while whatever has the power of bringing back these parts to the point, or nearly so, from whence they first deviated, lays a foundation for, if not absolutely performs a cure. Thus far of the medical state of things.

As there are no two bodies perhaps in the world, so exactly alike in their construction, as to be affected in the same degree either by the force of external Objects, or the byas of internal reflection; so there must ever be a vast variety in the natural and innate propensions of men: natural and innate, perhaps, but not unalterable. At least it is the design of the following observations to enquire, how far (the natural structure of the body considered) man may still be free; free from the greatest tyranny, that of unreasonable and impatient desires! and how far the fatal force by which he is drawn aside, may be imputed to some acquired imperfection in his structure. And then if by any rule of conduct, we can prevent that alteration taking place, it will then be allowed, "that Providence has not formed men of such materials, as necessarily impel them to illicit actions."

Man is compounded of Soul as well as of Body; and so compounded, that they frequently struggle, and occasionally conquer each other. Whatever be the mode of communication between these differing parts, or which ever first proves a traitor to the other by stubborn rebellion, instead of

friendly intercourse, the man is sure to suffer. Instances of this are the produce of every hour. The perceptions of the mind are at some times preternaturally suspended; at others, as painfully acute. In those diseases (for such they are, however momentary the Passions,) how is the natural strength of Reason, and Judgement impaired! a word, nay, even a look shall have power to pull reason from her throne, and make the evening which began with the social intercourse of friends, terminate like the bloody contention of the *Centaur*s and *Lapithæ*. In other cases, the tide of Life, instead of swelling into storm, is almost congealed into stagnation; and the material part, instead of being agitated into furious motion, degenerates almost to lifeless Clay:

— *She pin'd in thought.*

She sat like Patience on a Monument

Smiling at Grief—

The not unusual effect of disappointed hope, and silent sorrow: — happy for the marble, if at last it can be brought to weep.

The nearer we come to understand the influence, and assistance which our bodies give to these, and the like unfortunate changes,

changes, the nearer we shall approach to the spring of our rational happiness. For the Body is in general ordained to be the medium of our pains and pleasures here below. And with respect to the joys arising from health, I shall not think I advance an improbability in asserting, that the regular government of our passions, is more preventive of the troubles, and even decays of the body, than the guarding against unfavourable seasons, or unwholesome diet. At least, that the duly tempered mind, will in general carry about with it so heroic a body, as bravely to bear up against rude attempts, and dangerous efforts for its destruction.

The unthinking, self-contented peasant, feeds on the coarsest fare, braves the unfriendly dews, and dares almost the whole artillery of Heaven, perhaps without an ail. While his master, formed in as rough a mould, and partaking of some indulgences, which the other lacks; yet wearied with anxious projects, and tormented with eager desires for a splendid fortune, neither tastes the refreshing sleep, nor enjoys the balmy health of his poor contented hind. —

Observations of this kind will appear of more extensive consequence, than at first

sight, perhaps, would easily be imagined. For besides that, those who pay the least attention to the rational means of being well, are usually the most querulous amongst us; there are, who by an equally fatal extreme, are too solicitous to enjoy the happy state when found; — who sink below happiness, by aspiring to rise above Health. A constant attention to any one particular point, is always prejudicial to man: but a restless anxiety about present health, is to poison at the fountain head, the source from whence such blessings flow. Nay, so foreign is it to the voice of reason, and experience, that *Hippocrates* even advises some occasional excursions into mirthful jollity, as safer than the contracted path of unremitting regularity. However that may be, what we fear, we already in some degree feel: and some have brought themselves to such strong feelings of imagination, and such durable impressions of fancy, as no art has been capable at last of erasing. A cruel refinement this, upon self-deceit, when we have not only opened the fatal Box, but cannot shut it again so quick, as to confine Hope. But it is not designed to deny, that we are liable, without great care, to be hyassed by
 some

some internal feelings. The Sects of Philosophers probably first arose, from the constitutional dispositions of their respective founders. It would not, perhaps, have been an easy attempt to have made *Cato* an *Epicurean*, or *Mark Anthony* a *Stoick*. Nor is it every one at this time of day, that can modestly doubt, or decently dispute. The dull and phlegmatic cannot soar with *Plato*, or think with *Tully*. The impetuous, reap no laurels by a *Fabian* delay; nor the cautious post to conquest with a *Cæsar's* speed. But yet may we bend, what we cannot break; and prune the luxuriances, of what we cannot eradicate; and so blend the jarring ingredients of a faulty frame, as to become happy to ourselves, and profitable to others. To understand which position, we must observe in a general way, that the substance of the body is twofold, which may be divided into Solids and Fluids; and experience warrants our asserting, that the one contains the other. These fluids are originally in the form of Blood, and from whence every other fluid derives its origin. This red Blood is in perpetual motion, called its circulation, and so contrived, as very frequently to visit every, the minutest part. The Solids are

nour-

nourished and maintained by the fluids; and those fluids in their turn kept in motion by the Solids. Hence then to see how health, not only of body but mind, are under the influence of these, we must examine the Blood, and next those Solids which have the principal share in this Enquiry; and these are the fibres, and nerves. And then whatever may be the disposition of man, examine what innovations we are capable of introducing, by the regulation of these particular parts.

Of the Blood.

THAT fluid which is to contribute to Health and Happiness must constantly and freely flow. *Vivitur ex motu*, is the first of Aphorisms, and as comprehensive as it is concise. And if the purity of even water, which is in its own nature elementary and unmixed, continues such only in the *exercita cursu flumina*, what difficulties may we not think the purity of Blood exposed to, which is a compound of such discording principles? which flows in such confined channels? which is liable to the dominion of so many tyrants? But yet man was never meant to be, nor ever really was the sport of Fate or Fortune. That Idea and Expression served well enough to throw a cloud over some perplexities, and to cut the Gordian Knot of some difficulties which the Pagan Theology could not unravel; and has given rise besides to not inelegant descriptions in some of their Poets. And thus far it may be suffered to go; but not a step farther. For in fact, such is the nature of the fluid in question, that Sobriety in every animal Indulgence, and Temperance in every

ry intellectual pursuit, will leave it in that state for the most part, which is best calculated for the happiness of the individual. For however the Souls of men agree in their more notorious Qualities of Immateriality, Immortality, &c. There is no necessity that there should be, nor would there arise any advantage if there was, a strict similarity in their other dispositions. On the contrary, the difference observable in the mode and manner of the Soul's exercising its functions in different men, is advantageous to the good of the whole; while all Mercy and Pity; or all Fortitude and Resolution, would probably be subversive of that universal scheme of Harmony, which was meant to spring from this apparent discord. And that men who are laying Siege to one and the same object of their Ambition, should differ widely in the manner of carrying on their approaches, is so far from favouring the notion of Chance, and Fortune, that it proves in favour of superintending Providence: for thus is there scope given to the un-numbered inhabitants of the globe, to pursue and even attain the desired point, without treading on, or overturning their fellows in the Race.

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The Blood then is allowed to be a very material instrument, in the actions of the rational world; nay, so great an influence has this fluid been supposed to have upon our moral, as well as natural Life, that greatness of Soul and Sentiment, every noble and heroic act, are attributed almost proverbially to a particular degree of excellence in the blood, transmitted down to us from the veins of our Ancestors; but whose stream flows not always pure, and untainted to the latest descendant of noble Stocks. And even other sciences borrow the metaphor to express high degrees of merit, such as the great Orator's, "*Sanguis et Color Orationis.*"

Hippocrates talks of making men wiser by Diet: and it has been ingeniously debated, how far the morals of men might be amended by altering their mass of blood. The thought is not entirely chimerical, when confined within proper bounds. The heat, and other properties, which wine imparts to blood, are too notorious to need description: and to which shameful metamorphosis of the divine Image alludes probably that antient, but perhaps fabulous tradition, which tells, that the earliest cultivators of

the Vine, were wont on that occasion to make use of the emblematical manure of the dung of Lambs, and Lions, Monkeys, and Swine. And who knows not that those Productions, which were meant to support our Life, and refresh our Nature, may, by studied refinements be converted into fuel for illicit flames? and that something even worse than disease and death, may be the fatal consequence of an unlimited indulgence at the Epicurean's Board?

It would seem then, that to secure an unruffled calm in the breast of man, and to maintain the empire of reason, against the attack of lawless passion; some attention must be paid to the course, and quality of this fluid. Nor can any one be at a loss, how to conduct himself in this important undertaking, while Experience is at once an Avenger, and a Guide. It is a very trite, but at the same time, injudicious enquiry, what is, in general *wholesome*: And which *Van Swieten* not unaptly compares, to asking, whether the Wind is fair, without specifying to what Port we are bound. It would be giving useless, as well as abstracted advice, to say, that the Blood must be kept temperate, and fluxile. Every man of
 sense

sense knows when he rises refreshed from Table; and when he retires to rest a chearful, and a rational Being. That measure is to be always his Rule of Action, whatever relation it bears to that of other men; so again, must each man determine for himself, how far to hurry, or expend his fluids by exercise. Some men have set out with mirth, and chearfulness, who have returned peevish, and discontented, because they returned too much fatigued: And to remove that uneasiness, have indulged in excess of mirth and wine. Every Constitution cannot equally bear to ride, and almost fly: And some can even enjoy Health, and Rest together. I have been the more particular on this head, because rough Exercise is the darling Idol of the *English*: And Youth, fired by examples from the Greek and Roman Games, are apt to engage too far in manly sports, not promiscuously beneficial to *All*.

Every one, I suppose, is well enough acquainted with the celebrated fiction of *Medea's* proposal to restore *Æson* to youth and vigor, by letting out his old, and effete blood, and filling his veins with better; or in *Ovid's* own words,

— *Veterem haurire cruorem*

Ut repleat vacuas juvenili Sanguine Venas,

This fiction was realised about the middle of the last Century. Dr. *Lower* at *Oxford*, having made several experiments by injecting different liquors into the veins of animals, came at length to suspect, that the blood of one animal, might safely be injected into the veins of another: He made the experiment with success, and at last brought it to such perfection, as easily to convey the Blood from the divided Artery of an animal, into the Vein of a human Subject; a proper quantity of blood being first taken away, to make room. Lamb's Blood was generally preferred for the purpose.

The *Transfusion* of the blood was tried upon the human Subject, in more than one instance, both in *France* and *England*; and seemingly with good success. But as all striking discoveries seem to throw a shade of disgrace on those, who have not been so happy as to have any share therein; and there are always people weak enough, to fear new, and bold strokes in *Physic*; so this, as carrying with it something uncommonly bold, and adventurous, soon gave way to the attacks of the multitude. A Woman was

per-

persuaded by some of the faculty in *France*, who were the warmest in opposing this practice, to insist on having it performed the third time on her husband, who had been recovered by it from Madness twice before. The man died after the Operation; but upon a civil inquiry, it appeared he had been previously poisoned. The thing then became the object of public regulation, and was fettered with such restrictions, as to prevent its making any farther progress.

A proper regard for the welfare of mankind, rendered our countrymen, very wary, and cautious in their trials, so as, (if I mistake not,) to refuse an offer made them by the government, of having the bodies of Malefactors, to make experiments upon. This tenderness would rather increase, than eradicate any prejudices which the novelty of the undertaking naturally occasioned; and thus the affair ended at home, with less noise indeed, but with more reputation than in *France*.

Though many advantages were proposed, as the consequence of this transfusion of the blood, the most specious was that which *Lower* mentions; namely to restore blood quickly to those, who in Battle, or by any other

other Accident, had lost so large a quantity of it, that the remainder was insufficient to preserve life, or turn the aliment, into chyle. But whether so weak a state of body, is capable of admitting, and circulating a sudden reinforcement of Blood, may I think justly be doubted.—The other, and next most material enquiry is, whether by putting in a quantity of good blood, the remaining bad blood can be amended, or may not rather itself be changed, and vitiated by degrees. This is certain, that if the *Viscera* have contracted any stain, it will prove a constant source of infection to whatever blood you put in. And therefore *Lower* dissuades the Practice in such cases, quoting the well known remark of the Poet,

*Sincerum est nisi vas, quodcunque infundis
acescit.*

This Scheme, as very extraordinary in itself, and not very foreign to the plan of amending men's morals, by altering their Blood, I thought not improper to mention,

But I would in the last place recommend Reason, strengthened by Religion, as the most efficacious Instrument, to curb painful, and dangerous commotions of the blood;
and

and how great and sensible the pleasures are which wait on this greatest (though usually most silent) of Conquests, will be best known to those, who by avoiding every vicious indulgence, and cultivating every noble, and worthy Sentiment, endeavour to discharge their duty, in the most acceptable manner, to their Maker, their Country, and their Friend.

And that a devout frame of mind, does greatly affect the material functions of the Body, might be collected (if other proofs could not be found) from that tyrannical efficacy which false Religion, and its Consequences exert on its many deluded followers. Dejection of mind beginning; Amazement and Horror continuing; and (as we have too often seen, and even in these our days) Distraction terminating the melancholy Scene.

This Scheme, as very extraordinary in itself, and not very foreign to the plan of amending men's morals, by altering their Blood, I thought not improper to mention.

But I would in the last place recommend Reason, strengthened by Religion, as the most efficacious Instrument, to curb pain-ful and dangerous commotions of the blood; *Of*
and

Of the Fibres.

THE next parts concerned in this enquiry, are the Threads, or Fibres, which by their various form, and different force of Cohesion, constitute the Solids of the Body: That is, form the coats of the Vessels, the substance of the Muscles, and the firmness of the Bones; three very essential parts to the healthy existence of Man. The Fibres have a natural elasticity, as may be observed by the receding of their extremities, in a gaping wound: besides which they are endued with what Dr. Nicholls calls their *Vis restitutiva*, or a power of gradually returning to their proper length after having been forcibly overstretched, as is seen after Strains, Delivery of the Fœtus, &c. Besides which they are supposed to be always in a certain degree of Tension, which is therefore called their *Tone*, whether different from the elasticity above mentioned is not necessary at present to enquire. It is probably this state of the Fibres, which gives that strength and firmness of the flesh which is perceptible in Health, and on this side the depredations of Age. Authors go
 D still

still farther, and suppose a kind of *Tonic Motion*, that is in effect, a power of keeping up a proper resistance to the force of the pervading fluids, and a salutary pressure on such as flow within their influence. When these are considered as making the coats of the vessels, they become of more apparent importance in their influence over health; but it will not be difficult to understand, how on every account they bear a relation to the present Enquiry.

It is necessary that our Fibres should be in such a state, as readily to admit the nutritious particles of our food; yet neither so weak as to be overdistended with the force of the circulating fluids, or so tense as to be unapt to receive them. In the one case, the part withers, in the other, it swells. We have instances of this, both in a natural and preternatural state of the body. In Sleep, there is so manifest a relaxation of the Fibres, that during this state of insensibility, the body becomes more plump, so as that Ligatures, if close, are apt to be painful. Whence the custom with many, to unbutton the Collar at going to rest. The Colour is also at this time more florid, and usually a greater degree of perspiration,

and in some subjects, a plentiful sweat breaks out. A very opposite state of the Fibres to this, namely, a tenseness of them, is the consequence of the winter's cold: when the Skin shrivels up, and the parts are remarkably contracted; and during which, Perspiration being disappointed of an exit at the Pores, makes a successful effort to escape by the Kidneys; whence the difference of that evacuation, in the different seasons of the year. In a preternatural state of the body, this vicissitude in the state of the Fibres, is likewise observable, but never more so than in the paroxysms of an intermitting fever: when in the cold fit, we look pale, shrink and tremble; in the hot fit, heat and colour return, and a profuse Sweat commonly finishes the attack for that time. From what has been said, we may see the propriety of the term relaxation, when applied in a metaphorical sense. For though meant in general of such employments, or amusements, as were supposed to unbend, and refresh the mind, yet in their consequences, may be literally applied to a relaxation of the body. As in fact, too long and close an attention of the mind, has a tendency to dry up and overbrace the body.

Shall

Shall we say here, that Providence has thus given a check to that insatiable thirst of Knowledge which might have been prejudicial, either in feeding our pride, or destroying our health? or that he has thus made social intercourse, as absolutely necessary, as it is natural, and decent among indigent fellow-creatures? this at least we must say, that we are hereby cautioned to guard against all peevish discontent, and moroseness, by a moderation in our pursuits of intellectual improvement. Since the wisest, have not always been, the worthiest of men.

A hereditary Debility, and Laxity, in these original *Stamina*, constitute a weak and lax state of the Solids; as a contrary extreme, or too great a degree of elastic tension, produces a constitutional disposition to an opposite class of disorders, namely, inflammatory. We see this doctrine proved *a posteriori*, by the different effects of hot, and cold baths, the former evidently relaxing, the latter bracing up, and strengthening the Fibres. Infomuch that some northern barbarous Nations, are said to plunge their Children as soon as born, into the River, that they may try their na-

tural, and give them an additional strength; no ways repining, when by this method they are soon killed; as thinking a constitution, that cannot bear this trial, incapable of ever becoming advantageous to its Country, or comfortable to itself. On the other hand, in proportion as a soft, and shameful effeminateness got ground among that (once hardy people) the *Romans*, the use of perfumed ointments, and warm baths, became more frequent, and irreproachable.

Something like these effects, our bodies will naturally feel, from that constant universal Bath we live in, the Air. And as this is sometimes hotter and drier, at other times warmer, and moister, and thus in all the possible vicissitudes of our very uncertain *English* atmosphere, we cannot wonder at finding so great a variation in our health. There is a month, almost famous to a Proverb among us, for inspiring gloomy thoughts, and desperate actions. If we extend all this one step farther from the casual influence of a single day, to the more permanent one of a whole climate, we may in part account for the various make, and stature of men, the difference of their parts, and genitivities, and in some measure for the bent

bent of their virtues, and vices, as far as they flow from an indulgence of constitutional proneness. *Asiatic* Luxury, and *German* Intemperance, have been usually ascribed to such a cause. And hence there seems an elegant propriety in *Montesquieu's* observation, that all Laws are or should be calculated, with a relative view to the influence of the Climate, on the manners, and dispositions of the people.

The fluids of our bodies, and especially the Blood, will suffer in their health, and texture, from a vitious state of the Solids. And hence it is, that the passions of the mind, however they may be first in fault, do so instantaneously spread the mischief over the material part of us; and which mischief must ever be in some proportion, to the force of resistance, which in such cases the Solids and Fluids are capable of exerting. Hence as the Passions meet with a stronger, or weaker frame, must they rage in greater, or less degrees; become subservient to the true enjoyment, or perhaps only to the amusement of the mind. How great the difference, even in the constitution of lawful passions, is elegantly and graphically described by a celebrated Divine in the

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instance of Joy. "Joy (says he) was not
 "then, that which now often usurps the
 "name; that trivial, vanishing, superficial
 "thing, that only gilds the apprehension, and
 "plays upon the surface of the soul. A sud-
 "den blaze of the spirits; the exultation of
 "a tickled fancy, or pleased appetite. Joy,
 "was then a masculine, and a severe thing:
 "the recreation of the Judgment, the jubilee
 "of Reason." And thus will it ever be
 in all the other rational affections of the
 soul, where a proper cultivation of the
 mind, and a prudent regulation of the body,
 are happily met together in the same man.
 Of such importance is it, by what means
 we may, to adapt the body to receive, and
 reflect the splendor of the soul.

But farther—The growth of Animals as
 well as of Vegetables, is the consequence
 of a gradual unfolding and expansion of
 their vessels; by a slow, and progressive in-
 filtration of fluids, adapted to their respec-
 tive diameters, until being stretched by the
 utmost bounds allotted them by Providence,
 they reach their state of perfection, or in
 other words arrive at their full growth.
 This gradual unfolding seems to depend on
 the progressive, and percussive force of the
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circulating fluids; which force of circulation, elongating the Fibres, seems in some constitutions too great, in proportion to the force of their lateral extension; or in other words, the animal grows too fast, and thus the Fibres are not nourished in all parts equally. And therefore it is, we see those premature growths generally attended with a great weakness of the blood-vessels, especially those of the Lungs. From this account we may understand, why children who discover an uncommon penetration, and strength of genius too early, are so often short lived: because a great part of those subtle fluids, which should give strength and maturity to the body, are called off to become subservient to the operations of the mind.—*Quintilian*, who had just experienced this cruel stroke, by losing a Son in whom were the promises of early and uncommon merit, makes the same reflection; but argues with a kind of fullen impiety on the cause, as though through the Envy of the Gods. “*Ut prorsus (says he) possit hinc esse tanti fulminis metus, quod observatum fere est, celerius occidere festinatam maturitatem; et esse, nescio quam, quæ spes*

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tantas decerpit, invidiam; ne videlicet ultra quam homini datum est, nostra provebantur.

Whatever therefore conduces to defraud the body of its nourishment, while in a growing expanding state, as too early an application to serious employments; or which when grown, enervates and debilitates the vigor of its fibres, as shameful ease, and unremitting sloth: Or on the contrary, what heats and dries, and winds up the man to an offensive degree of tension, as excess of liquor, and improper labour, has a manifest tendency to render the body an uneasy companion, or rather a bosom traitor to the soul.

For the different state of nerves in different men, is no inconsiderable source of that variety of characters to be met with in the world. 'Tis these that in a great degree form the man, whom no threats can move, and no dangers fright. That supply the flowing streams of oratory; or keep back almost breath, as well as words; that route to madness; melt to softness, or fix to insensibility.—But let me not be misunderstood, as if I meant hereby to make man a mere machine. For if Reason were capable of holding

Of the Nerves.

WE come now to the most difficult part of our Subject. A kind of boundless ocean; a deep unfathomable abyss. The Nerves are those (almost tyrannical) instruments of our sensations; without which we can have no bodily perceptions, and by the means of which we can suffer such variety of pains. So that the ingenious author of the *Neuropathia*, had reason to exclaim;

*O fortunatos nimium, sua si bona norint,
Quæis cerebrum et nervi nativo robore pollent,
Spirituumque latex dives fluit, ac generosus!*

For the different state of nerves in different men, is no inconsiderable source of that variety of characters to be met with in the world. 'Tis these that, in a great degree, form the man, whom no threats can move, and no dangers affright. That supply the flowing streams of oratory; or keep back almost breath, as well as words; that rouse to madness; melt to softness, or fix to insensibility.—But let me not be misunderstood, as if I meant hereby to make man a meer machine. For if Reason were capable of

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holding her peace at such an assertion, Religion would certainly cry out. But this only is to be understood by it; that as the Nerves are by the construction of our bodies, made the necessary mediums of our pains and pleasures; and as the hinges on which the most of human actions turn, are the pursuing of what we wish, and avoiding of what we dread; it cannot be denied, but that our actions must be byassed by the probable consequences of them, which we paint to ourselves: and yet more so, if perchance we have tasted of the bitter pill, and can quote experience in our favour. Thus can I conceive a man fired with an honest, or (if you please) even an enthusiastic love for his country, without daring to burn with *Scævola*, or bleed with *Regulus*. As I can (on the other hand) that the exquisite torments, devised in some *Christian* countries, should sometimes not be able even to extort confession. But as I cannot allow human nature to support itself under exquisite torments, without internal aids, which the world cannot give; so can I scarce conceive this to have been the case with those enthusiastic *Romans*, who courted such deliberate deaths; and I must absolutely refuse it to

those horrid Regicides, in whatever age, that would stain the annals of any Country.

It will easily be collected from hence, that I suspect there must be a strength, and ability to bear bodily torture, before a man can attempt the character, or arrive at the reward of a suffering *Hero*; and that many Heathens have probably been indebted for their reputation in this kind of conflict, to some natural, or acquired insensibility of the *Nerves*.

Nay, invention has been called in, to give artificial fortitude, where (even corrupted nature) could not keep the field. I mean on those shocking, and barbarous occasions, when loud, and noisy instruments were forced to be employed, to drown the piercing shrieks of innocent children, thrown to fry in agonies, to the honour of the **DEVIL**.

There are doubtless, many good and upright men in the world; and in a degree, beyond what a meer heathen could ever have conceived. And yet (who with all these superior advantages) would not venture to promise for themselves what the Poet (as such has beautifully done:)

*Si fractus illabatur orbis,
Impavidum ferient ruinae.*

Nay, whom Storms, and Thunder, and similar alarms, do too often, as it were, constitutionally affright.

But be it remembered, that these reflections, are not meant to extend to those sacred Characters, that braved every Danger, and felt every Torture, that the rage of Persecution could invent. These probably had supernatural assistances to carry them through this, their fiery trial: and therefore no arguments can be drawn from thence to invalidate the force of the present reasoning.

But to come yet nearer to the subject of this Enquiry. The Nerves, like the Fibres, and other Solids, are capable of being improved in what (I may call) their fortitude; and of being degraded from that height of firmness they were formed to possess.

If the Nerves of the female are delicate, weak, and easily put into hurries; yet by moderate exercise, and many prudent aids, they may be brought to share, even the fatigues of men. And on the other hand, Man by dishonest sloth, and disreputable indulgence, may enervate himself even to the weakness of a child. That the strength

of Nerves is variable in the same man, at different times, needs no better proof, than the different force of resolution he is capable of exerting, when under the influence of a chearful flow of spirits, or under the dominion of a kind of stagnation of the mind.

The pallid consumer of midnight oil, though his mind be stored with the choicest precepts of philosophy, and enriched with the experience of many ages, yet will find himself start, and tremble at a sudden noise. And the hurry of imagination, and solemn stillness of the night, has conjured up many more Spectres than that in *Brutus's* tent. Debauchery, and excess even in weak liquors, can shatter this necessary part of our system, to a degree that will imitate, and even anticipate the tremulous unsteadiness of age.

But there is another source of evils, in which our Nerves seem to be officiously busy, which bring on us very sensible troubles, and are thought scarce possible to be removed. And these are the *Antipathies*, and abhorrences of our nature. Some harsh, grating sounds, throw us into disorders which Reason cannot correct; and some

some sensations seem so constitutionally repugnant to our quiet, that we suffer, without (as it would seem) even attempting to contend. Something however might surely be tried, to obviate this misfortune; (for such it is in a greater, or less degree to most) and that by using every external art to fortify our Nerves, as Temperance, Bathing, and Exercise; and by avoiding every kind of folly, that tends to relax their Vigor. Besides which, let us try, whether here, as in most other cases, familiarity will not breed contempt; a contempt of that plague, which is such, not in its own nature, but in our unhappy misapprehensions. It is not perhaps the Spider, or the Cat, which we fear on their own account; but that we have formed an imaginary state of suffering, and horror, as the necessary consequence of such creatures touching us. Could we once be persuaded to let them approach us, with resolution, we should soon come to touch them without pain. At least it is a very notorious fact, that nervous aversions are the most frequent, in persons of the liveliest imagination.

It seems therefore no unnecessary piece of advice upon the whole, but applicable enough

enough to the present Subject, that as we should not often venture, in a moral view, to the utmost bounds of lawful pleasure; so in a physical one, we should not give the utmost scope to the powers of pleasing sensation. If the nerves of the palate be too intensely, as well as frequently incited to minister to the gratification of luxurious appetite, what can we expect will be at last the consequence, but disappointment in relishing the very wholesomest of food? The abuse of odoriferous scents, and exquisite perfumes, are found very prejudicial to some constitutions, and particularly to the functions of the Brain. And to such who have impaired their scent by such refinements, it is in vain to talk of the cheap and natural fragrances of blooming meads, and new mown hay.

But the greatest variety in the structure of this part of our frame, is perhaps with relation to the effect of sound. If by music be meant that Sound, which pleases the ear, and charms the soul, we may include almost all mankind in the musical class. Even the *Warhoop* of Indians, and the funereal ululation of a part of the world, is melody to some ears; to which the dying
strains

strains of a thrilling Italian would probably be an intolerable pain. As Philosophers and Legislatures viewed this science in different lights, they applauded, or condemned it accordingly. Some banished it as corrupting the morals; others modified it, as regulating the passions of the subject. The use of it in war, is certainly productive of good consequences, by exciting to martial ardor, whether that was originally the design of it, or not. Upon the whole, taking it in the extensive sense, of pleasing sound, or cadence, musick is the greatest blessing of mankind, because the most universal. The feathered race, the whistling winds, the pleasing declaimer, the chearful artisan, the specific sounds of all vocal creation, cannot but furnish out at all times, and to all men, a proportion of this indulgence. And perhaps this enjoyed in moderation, by attuning the passions, and calming any little tendency to irregularity in the blood, may be the most wholesome indulgence that man can partake of here below.

*Of the Temperaments, and Ages of
Man. Of the force of Habit; and
supposed Decay of all Nature.*

I Proceed now to some other difficulties, which must be removed, before we can rescue man out of the hands of all those tyrants, to whose power, *Opinion* so readily gives him up. And the first is, the prevailing force of *Temperament*; the *Sanguine*, the *Choleric*, the *Frigid*, and the *Melancholic*. Now Authors have laid down rules for the actions, and dispositions of men under these supposed influences, not only differing from each other, but such as do not invariably agree with the experience of the world: not unlike to the *Spleen* being made the seat of *Mirth*, by the Ancients; the nursery of serious *Sullenness* by the Moderns. And indeed there has always been a labour of affectation, in drawing comparisons between (what probably) have no just or necessary similitude, the *Humours* of the body, (as they are called,) and *Elements* of the material world. For even, supposing the melancholy man *earthly*, and

therefore *stable* in all his resolves: the *Choleric* man possessing *fire*, which may be smothered for a time, but not extinguished; the *Frigid* man to be a reservoir of *watery, cold affections*; how can the *blood* and *air* be brought into any rational similitude? and yet under the dominion of these elementary influences is the free agency of man to operate, according to these philosophers. But they go farther yet, and not only suppose these humours thus inherent in the man, but that they look out, and proclaim themselves externally, in the features, the form, and the colour of the Body. And I suppose that Providence itself, would hardly have been allowed capable, by these men, of putting, or preserving an amiable Soul, in the *Zoilus* of a *Martial*, or the *Thersites* of a *Homer*. And yet it is almost an established truth, at least (it is a benevolent error,) that, in general, the misfortunes, and defects of the body, are amply recompensed by the superiority of the mind. But to give up even all this; and to allow the *Physiognomists* to be men of sense and penetration, even thus there arises no fatal impulse from hence; at least if we will believe the judgment, and trust to the example of a *Socrates*.
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And as this method of judging of men, has a tendency to the most illiberal of failings, prejudice; and to the most inexcusable of prejudices, those formed hastily, and at first sight, it cannot be too much discountenanced by all ranks of men.

Next to the *Temperaments*, we are attacked with the *Ages* of Man, with the indisputable variety of *Youth*, *Manhood*, and *Old Age*; for *Infancy* may fairly be left out of the Question. But shall we give without distinction folly, and almost madness to Youth; prudence, rare as the phoenix to Manhood; and a churlish frost of mind, as well as of body to Old Age? we should in this case determine, with neither sense, nor judgment, against the suggestions of candor, and the unerring voice of truth. Let the two extremes, as we may call them, of Youth and Age, be allowed their accustomed propensities. Let Youth be warm with hope, and eagerly expect beyond the possibility of full satisfaction. 'Tis the error commonly of an unreflecting mind; not the tyranny of an untameable body. Let Age be waspish, discontented and severe; 'tis generally the fruit of an unfair comparison between the present, and the past.

It forgets all the long continued, and repeated blessings it has enjoyed, in a protracted, and prosperous length of days, to reflect on, and envy those indulgences, which are calculated for younger breasts. At least, eager expectation, and over-bearing selfishness, with many other unbecoming follies, are confined to no particular season of life; but found as well in those whose blood creeps in lazy mood, as where it riots in brisk, and lively flow. It cannot be denied, but that there is a difference in the texture of both Solids, and Fluids, in Youth, and Age; in the morning bloom, or solemn evening of life. But either their influence over man is inconsiderable, or may be brought into subjection by wisdom, and goodness. At least, the world has known, and I trust ever will know, many young men made more amiable by blending prudence with vivacity; and many old ones truly venerable by mixing chearfulness with wisdom.

Some attention is due on occasion of this enquiry, to the prevalent influence of *Custom*, and which is so exceedingly great, as to be allowed the force of a second nature. This, as it displays itself in the strength of evil

evil habits, the fruit of the irregular dispositions of the heart, none I suppose are inconsiderate, or shameless enough to go about to defend. As the mischief here is not only seen by many, but usually felt by all; all at least, who are within the reach of their extensive, and baneful influence. But the excuse for this will most probably be laid on the body, that frail part of us, that has now perhaps been indulged (though doubtless for wonderfully good reasons at first) to such a degree, as has warped it beyond a possibility of bringing right: and attempts of which kind so far from regulating the manners, would (it is generally taken for granted) destroy the man.

Now acknowledging, what is incontestably true, that the obligations of custom are most fatally binding, and the fetters of habit, perhaps the heaviest we can wear, yet shall we therefore submit tamely to the yoke, and not rather the more vigorously labour till we have shook it off? I speak of those habits, and customs of the body, which draw along with them the faculties, and dispositions of the mind. For as to those habitual indulgences of a lighter sort, while they amuse without disgust, and enter-

ertain without detriment, they are at least innocent, if not in some degree useful. But there are certainly many of a fatal tendency.

There are perchance who arrive not to move, nay too often alas, not to think (at least to any purpose) till repeated draughts have rouzed, and wound up, as it were, the faculties of their soul. Whose trembling limbs owe their momentary firmness, to the deceitful aids, which liquor supplies. And can we safely say to such unhappy victims of error, that they are mad if they pursue their course? might they not with some shew of reason reply, that if they did not pursue it, they should come to be mad indeed? But to rescue even such, if not too far gone, from a worse than *Egyptian* bondage, let them try whether their fibres, nerves, and strength, may not yet be saved, by very gradually diminishing, what contributes to their ruin. For thus the subtraction like the addition, by being gradual, becomes scarce sensible: Since *Habit*, like a complex mathematical scheme, flowed originally from a point; which insensibly became a line, which unfortunately became a curve, which

finally became a difficulty not easily to be unravelled.

To any other (and there will always be many importunate suitors at the gate of *Sense*) let us still find a cause for delay; and what better excuse for not receiving such dangerous guests, than urgent business; that is constant, and useful employment. The story of *Penelope*, whether fiction or not, affords us a very beautiful lesson; that we should prudently dissemble, and artfully deal with those enemies, whom we dare not attack in open combat. The body both can, and most inevitably will be won over to the interests of the enemy, unless by some finesse, some unexpected stratagem, we carry it to the standard which Reason sets up, or save it under the pointed cannon of rational employment.

Another head of enquiry on this occasion arises from a strange (and with many) a favourite supposition, that the *World*, and all *Creation* grows *old* and *infirm*; and if so, it is no wonder that the strength and vigor of man's body should come in for its share of this decay. And indeed great and uncommon pains have been laid out upon this hypothesis, which if true, would not affect
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the argument, but which may easily be shewn to be false. For in the first case, let us suppose for a while, that the frame of the early inhabitants of the world, was greatly different from that of the present. The race of giants is certainly extinct, and the age of man, is indisputably curtailed. Be it so: but will it follow from these, or similar observations, that such a structure of the bodies of those ancient inhabitants of the earth, was a defence to their sacred tenant, the soul? That the imaginary purity of its elements, and beautiful harmony of its texture, never interfered with the functions of religion, or attempted to throw a cloud over the emanations of reason? This we certainly know, that *Adam* fell; and we may well believe that *He* had as pure a Soul, in as fair a Body, as any meer man ever possessed. Yet he knew what a defection from innocence meant; and experienced (some at least) of the frailties of his posterity. Even murder, the first, and foulest of crimes, was committed by one of his immediate descendants. Here then seems to be no room for the *Soul's* Apology, as if the *Body*, which its Maker had given it for a *Companion*, had beguiled it,

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and therefore it had *sinned*. And in fact, not only bodies of the purest texture on earth, have been united to sinning Souls; but superior Beings, unembodied Spirits, even *glorious Angels* fell.

But in the second place, to what strange absurdities does not the opinion tend, which supposes this continued degradation of Body to be real? The argument, if it proves any thing, proves too much; and thus is destructive of the consequences it is brought to favour. The constant deviation of man, and his virtue on this plan, from the earliest ages, to the present time, must have arrived to such a degree of infirmity of body, and impurity of soul, as would long since have rendered the world, a habitation only fit for devils, or diabolic minds in human shape.

But it is well known, that this opinion, however diligently urged, has been both resolutely attacked, and as successfully refuted. Philosophers might at first be inclined to give it countenance, as it afforded much matter for elegant speculation. And some few perhaps might have hastily adopted it, in consequence of, but a partial view of things; an examination of but a few

links, in the prodigious chain of nature. But whoever *planted*, or whatever *watered*, it was the *Corruption* of mankind, that gave it *increase*; that it might catch hold of its *twigs*, when it feared to *sink* into condemnation; or that it might be *hid* behind its *leaves*, when the voice of *Conscience* called to it, to appear *naked*.

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Of Education, and Fashion.

A Very considerable preservative against both bodily, and mental Ills, is without doubt a good *Education*. But education like honour, has a very vague signification at this time of day; and like it too in another sense, must be relative to the subject to which it is applied. And if (as indeed we must) we call in *Fashion* to assist in settling the definition, how very whimsical, and variable will the import of the expression be?

Education in the abstract, means but feeding the body, while in the other extreme of definition, it extends to forming the mind. And yet very seldom perhaps is the body fed, or the mind formed, with that degree of prudence, which has a tendency to give health to the one, or happiness to the other. And then the fault in general will be sure to be thrown on some fatal propensity in our constitutional frame.

But into what strange deviations from designed perfection, may not our bodies be brought, when fashion has unlimited authority to mould, to turn, and twist them

at her will?—The prudent *Gardiner*, keeps off, or invites the Sun, as he thinks most conducive to bring his plants to perfection.

—The tender blossoms, which are to be followed by much pleasant fruit, are the objects of his constant, and unwearied care.

—The *Husbandman* sees with concern what still (he cannot any way prevent) that drought or moisture which will endanger his crop. But unthinking man, in higher stations, dares submit the greater hopes, the hopes of his posterity, to influences more fatal than any Season, to vicissitudes more changeable than any Climate.

For whatever be the form, or how tender soever the texture of the most amiable part of the creation, the fair Sex; yet who can overlook, in an enquiry of this nature, that degree of exposure, which an attention to their health, should in many of them, necessarily preclude? for to go more, or less naked, more or less decently covered, depends not in our days, on the state of seasons, or periods of age; but on the *undistinguishing* edicts of fashion.

From the same unhappy source sprung the custom (at present indeed reversed) of binding in unyielding bands, that part of the

the body, which nature, by discontinuing the inclosure of the ribs, seems to have evidently pointed out, as designed for perfect freedom.

If we look into the terrors and apprehensions of this Sex, how many (too often) and unnecessary do they seem? Proceeding it may be from judging erroneously of what is really becoming; or the effect of an education, for which they deserve perhaps to be pitied. Let it be this, or whatever else you please, so that it be not mistaken for the consequence of such a frame of body, that it is impossible for it not to be constantly, *trembling most exceedingly.*

Yet equally great would the error be on the other hand, if that sex which was formed to please by natural softness, and to charm by native elegance, was to be by rude, and rough education, hardened as it were, into man. This would be a change, in every sense to their detriment; not only in the estimation of the world, but in the article of their own health and well being.

But these are not the only inconveniences to be pointed out, in the enquiry we have undertaken. For to what, but to the prevalence of being led by custom, rather

than by reason, shall we attribute that want of attention to the earlier part of life, when human nature is almost blindly, and indiscriminately submitted to one invariable rule of management? the puny offspring of the sons of debauchery, as well as the stout productions of the unenergized peasant, must alike, if fashion leads, tread with naked feet, the cold, the wet, or the rugged path. And if by these, or any (yet to be invented errors) an unhappy state of body, shall be for ever entailed on such innocent sufferers, how can we with propriety blame the Author of mercies; the benevolent Designer of Man's happiness?

To lay down then one general rule for rational education; let it ever be made relative to the sex, the situation, the temper, and profession of the party. And let us vary our method of building up human nature, in proportion to the height; it may be expected to arrive at; and the situation, in which it is likely to be placed. Thus would many painful conflicts of mind be spared; and many dangerous propensities of body, avoided.

If the Soldier and the Plowman require to be steeled and hardened; the Gentleman,

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however, and Scholar need not be ashamed of *Sensibility*. Let those who from their employment must face danger, and frequently encounter difficulties, be well acquainted with the nature, and appearances of both. But those who are never likely to come into this situation, may well be spared the painful impression on their minds; need not be made to struggle with fancied terrors, and to fight the windmills of imagination.

As far as constitutional proneness is really apparent, let it by all means be kept under; at no rate encouraged, or inflamed. And this attempt if set on foot in the ductile age, when pliant nature almost bends to *Instruction's* hand, will be found a matter of no great difficulty. The carrying the eye of attention, in more advanced states, to scenes and prospects widely differing from what the mind would brood upon within, has been often practised with success. A tendency to amorous softness, and *Sybaritic* luxury, may not improbably be overcome by the severer pursuits of mathematical investigations: while too thoughtful a mind, and one of too serious a turn, must walk abroad over smiling nature,

ture, and expatiate among the brightest scenes of laughing creation.

If *Nature* in the material world, has provided every poison with its proper antidote, (which seems probable, and agreeable to the goodness of Providence) we cannot think the more important health of the mind has been less attended to; much less entirely neglected. So far otherways, that there is ample provision made to obviate every inconvenience that Man can reasonably complain of. But some men, alas are too indolent to *seek*; and some even too abandoned to *desire* a Cure.

Of the Passions.

WHAT has not been said on the subject of the *Passions*, by authors of almost every denomination? *severely* by the Moralist: *fancifully* by the Declaimer: *elegantly* by the Man of Sense, and polite literature. But shall I venture to suspect, that in general, more amusement than improvement has sprung from these their labours? shall I be allowed to hint, that the *cynic* frown of some moral teachers, has terrified from the attention due to their good design; and the too *metaphorical* imagery of others, imposed *flowers* for *fruit* on *undistinguishing* readers?

The *Heart*, like the shop of *Vulcan*, has been supposed the *Forge* of the human passions. The *Blood*, the *glowing flame* that was necessary to the operation; and I know not what tenseness, or other mode of structure in the fibres, the *hammers* that were to compleat the work.

Or if it is more necessary to raise a *Storm*, the *blood* can even *biss* and *ferment*; the *Solids* *vibrate* with unremitting fury; *Palinurus* be dashed from the *helm*; and man's

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frail *Bark* be driven on the pointed rocks of ruin.

Or on the contrary, let us see *Man* becalmed, when his *milky* blood flows delicately through his *filken* veins. His Solids, like *Cleopatra's* silver oars, striking gently on the placid stream.—Or lastly, shall *Man* be a chemical elaboratory, where sorrow is *distilling*; towering thoughts *sublimating*; patience *evaporating*; and hope *precipitating*?

Have not these allusive descriptions a tendency to strengthen the errors we are striving to remove? Do they not seem to make it as impossible for man to resist the force of his passions, as for the leafy grove to withstand the boisterous violence of *Æolus*; or the trembling earth to subdue, and conquer the *undermining* flames of an *Ætna*?

However that may be, to eradicate the Passions is the attempt of fools; but to bring them under proper regulation, is the triumph of wisdom, and wisdom of the truest sort; which inclines us to the paths of duty, in order to put us into the possession of happiness; and in which undertaking if the Body does not co-operate, it may at least be prevented from hindering the work.

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Providence like an indulgent parent, has not only endued us with an appetite to the pursuit of happiness, but has laid the scene of it within our reach; nay, planted it within our breasts. But we must not give so important, and sacred an appellation, to the being masters of those gaudy trifles, or unnecessary incumbrances, for which some men toil to the destruction of their health; and even strive to the detriment of their reputation. For in this pursuit, every *nerve* must be strained; and the *blood* be put into, and kept in constant agitation: And if the bodily powers sink under such a load, they fail but as every other power does, when exerted beyond its natural abilities.

Would men object any thing to the purpose here, they should advance, that many are so unfortunately framed, that they cannot help being *avaritious, ambitious, or cruel*. They should insist that *Alexander* was *impelled to run* about the world: and that it was *Nature* made him burst in tears, when there was nothing left to conquer.—That *Nero*, who shed such torrents of his subjects' blood, and refined on every species of cruelty, was *constitutionally* hurried on, by insuperable necessity, to look with composure,

and even smile with rapture, at scenes of barbarity, which nature shrinks to name. And yet, this *same Nero* could once (as we are told) when a sentence of condemnation was brought to him to sign, "*pathetically lament, that ever he had been taught to write.*" So true is it, that our evil habits are usually acquired, not born with us; and our little tendencies, if they become formidable, the work of our own hands.

What is there then in the nature, or structure of Man, as such, that is incompatible with serenity of Soul? inconsistent with such a composure of mind, as to render him neither insensible to pleasure, nor too impatient of pain? suffering neither this to depress, or that to elate him, beyond what his own reason can approve. How can the body tyrannically fix the force of evil, in opposition to the influence of that well-tempered mind, which reduces great evils to lesser ones, and small ones to none at all? which superior to the blandishments of flattery, makes a man intimately acquainted with himself; and proof against the attacks of malice, courteous, and affable to all about him? which gives a lasting relish to every enjoyment; exalts the
most

most trifling circumstance into amusement; and confirms his satisfactions, by stamping them with the approbation of *reason*.

It is true, if we view men at certain times, when turbulent with rage, and fired with frenzy; glowing with revenge, or sickening with envy; swelling with false hope, or turning pale with disappointment, we shall see the body in *agitations* indeed. But it is then apparently trembling under the *iron rod*, with which the imperial tyrant, *Passion* governs. Though at length perhaps, by too long custom it becomes so tame and helpless, as to yield its obedience at the faintest call. And then indeed must be allowed to operate fatally, and influence too effectually the actions of the man.

To lay down rules for the regulation of the mind, or to give a chart to point the quicksands which intercept us in our voyage to Content, may not be thought perhaps to fall properly within my plan. However that may be, it seems so very intimately connected with the Subject, that I cannot entirely dismiss it, without a few observations on that head.

Now, without examining with the ingenious Madam *Dacier*, whether all the passions

sions are reducible to *Love* and *Envy*; or with *Horace*, whether "*Nil admirari*," be a remedy for every mental disease; I would recommend as an Antidote to the poison of disquiet, which lurks most probably at the root of every turbulent passion, the prudent submitting of ourselves, to what may be called, if properly understood, *Necessity*. By which is not meant such an opposition to our wills, as is unsurmountable by human power (for then there is no room to contend) but such a firm conjunction of unfavourable circumstances, as to overcome, or even oppose, would be productive of greater evils to ourselves, and the system to which we are allied, than a patient acquiescence under them: where a victory would border nearly on the ruins of a defeat. In this instance copying the subtlety of *Mahomet*, who determined with great prudence to go to that mountain, which he knew in the nature of things, could never come to him; and by this lucky expedient at once palliating his disappointment, and obviating his disgrace.

But however the wisdom of such a step, may be granted by some, many doubtless will object to the great difficulty which attends

tends it. Let the following method therefore be laid down as conducive to enable us to overcome the seeming reluctance of our nature, to the hard terms proposed.

As in the natural world we distinguish the heavenly bodies into their real, and apparent magnitudes, so in the moral world, we should distinguish between the real, and apparent magnitudes of those objects, which have a tendency to throw our frames into confusion. There is a moral good, and evil inseparably attached to the nature of things; and relative to ourselves, and the system of which we make a part. But this when viewed through a deceitful medium, will appear to be greater, or nearer than it really is. What illusive phantoms of greatness did not *Alexander* view through the magnifying glass of *Ambition*? And the destroyer of the *Temple* of *Diana*, through the false one of *Fame*?

The method then proposed, is to aim at viewing every thing, in a fair, and favourable light, or at least to cheat ourselves (if cheat ourselves we must) into a comfortable, and happy situation. The well known story of *Procrustes* may be improved to this purpose. Every thing was soon made sub-

fer-

servient to the measure of his will. The redundancy of unhappy victims were lopped off from some; while additional torture extended others. What was his iron bed, should metaphorically be our downy couch: that is, by submitting our wills to the rule and square, of what is with respect to us, in the place of unavoidable necessity, we should purchase lasting peace, and pleasure. We contentedly suffer the change of the seasons, because we prudently provide against their influence; and what a thick coat is against the cold of *December Snow*, a resolute mind should be against the nipping frosts of *Adversity*.

In a word,—are we disappointed in our most eager and earnest expectations; let us cease to hope for what we cannot obtain, and learn to seek what is within our reach. Do we pant, and toil after a flying fortune; is not preferment sitting at our door? are our arms too short to encompass the globe? the waste of competency may come within our grasp. Thus may we ever elude the bitter draught of disappointment, and carry about with us an Antidote to its intoxicating poison. So wisely did the *Stoicks* judge, that they have left this remarkable charac-

character of their *summè Sapiens*, "that he can never be disappointed, because whatever he sees *necessary* for him, he makes it his *Choice*."

How unsatisfactory the attainment often proves, of what we so eagerly admire, the experience of multitudes can testify. If *Power* be the Idol we worship, 'tis a dangerous possession: if *Learning*, a conditional advantage: if *Riches*, an uncertain good. *Sejanus* lost his life; *Galileo* his liberty; and *Cræsus* was on the brink of *both*. To be too anxious therefore in the pursuit of these, is something more than *Folly*. Suppose indeed the world should condescend to value us, in proportion to such accidental *appendages*, we have little reason to be proud of their good opinion, who praise, and condemn with so little discretion. And one thing at least we should do well to remember, that every degree of pre-eminence we have over our fellow-creatures, may be compared to a *shining* light, which necessarily places the faults, and failings of its owner in a more *conspicuous* point of view.

CONCLUSION.

UPON the whole then, and to look back on the scenes we have passed, in this little journey over the body of Man. — What have we found in those three capital parts of our composition, the *Blood*, the *Fibres*, and the *Nerves*, which can justly be deemed the artificers of our *Misery*; or the unavoidable corrupters of our *Innocence*? Have we not on the contrary seen the assertion verified, “*that God hath made man upright; but they have sought out many inventions.*” Have we not seen that he often yields himself a willing captive to the dominion of favourite passions? that he knowingly supplies his enemy, with strength and ammunition, to be employed against himself? And that he first dismisses his *Guards*, and then complains of inability to ward off *danger*? Or if by more prudent conduct, and serious reflection, he keeps clear of such a shameful overthrow; yet does he not suffer the force of *Example*, of *Custom*, and of *Fashion*, to mislead him into great inconveniences? So that if we will confess the truth, we shall be forced to own, that we bring on ourselves much the greatest
part

part of those mischiefs, which we are so fond of attributing to the influence of our *Bodies*.

A *hereditary, weak, and crazy* constitution, incapable of much benefit from Reason and Regimen, would be the strongest objection that could be brought. But even that will almost vanish by considering, that 'tis the lot of but very few, compared with all creation; and that even such by the assistance of *Temperance* and *Religion*, have struggled with, and almost conquered these great infirmities: not with a *Stoic Apathy*, denying pain; but with a *Christian Fortitude*, refusing to murmur.

F I N I S.

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